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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,472	09/30/2005	Masahiro Miyauchi	1843.1007	4404
21171 7590 09/06/2007 STAAS & HALSEY LLP SUITE 700			EXAMINER	
			HAN, JASON	
1201 NEW YC WASHINGTO	ORK AVENUE, N.W. ON. DC 20005		ART UNIT	PAPER NUMBER
	,		2875	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/551,472	MIYAUCHI, MASAHIRO				
Office Action Summary	Examiner	Art Unit				
	Jason M. Han	2875				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the o	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be ting 17 iii apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133).				
Status	•					
1)⊠ Responsive to communication(s) filed on 13 Ju	ne 2007.					
	action is non-final.					
3) Since this application is in condition for allowan	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-6</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-6</u> is/are rejected.	•					
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examiner	r.	·				
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correcti	on is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(d).				
11) ☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119	•					
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)☐ Some * c)☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents	have been received in Applicati	on No				
Copies of the certified copies of the prior	ity documents have been receive	ed in this National Stage				
application from the International Bureau	` ; ;					
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail D					
3) Information Disclosure Statement(s) (PTO/SB/08)	5) 🔲 Notice of Informal P					
Paper No(s)/Mail Date	6) Other:					

U.S. Patent and Trademark Office PTOL-326 (Rev. 08-06)

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DETAILED ACTION

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Response to Arguments

- 1. Applicant's arguments filed June 13, 2007 have been fully considered but they are not persuasive. Overall, the prior art to Matsunaga et al. (U.S. Publication 2002/0142133 A1) remains commensurate to the scope of the claims as stated by the Applicant within the body of the claim language and as broadly interpreted by the Examiner [MPEP 2111].
- 2. First, in response to Applicant's argument, "Because Matsunaga describes his anti-glare layer attached to the LCD surface to diffuse outdoor/outside light and further separately describes incorporating an "optical diffusion plate" and "backlight" (i.e., in addition to Matsunaga's anti-glare layer), it is absolutely clear that Matsunaga's anti-glare layer itself cannot be one and the same as Matsunaga's "optical diffusion plate" or Applicant's claimed "light diffusion plate." If Matshunaga's anti-glare layer and Matsunaga's "optical diffusion plate" were one and the same (which they are not), they would not have been described as separate elements with different functions used in assembly Matsunaga's LCD as quoted above" [Page 6], it is again reiterated that a broad interpretation was applied to the claim language, whereby Matsunaga teaches a light transmitting resin [Figure 1: (2)] and a light diffusing agent [Figure 1: (3)]. It further remains clear that the above structure could be incorporated into a LCD device including a (direct) backlight, as corroborated by the Applicant [Page 6 – Matsunaga: Paragraph 67], and as elucidated in the rejection to Claim 6 below. Lastly, Applicant is advised that it has been held that a recitation with respect to the

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manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations [Ex parte Masham, 2 USPQ2d 1647 (1987)].

- 3. Second, in response to Applicant's argument that the present invention is clearly different from the anti-glare layer of Matsunaga [Pages 6-7], there is insufficient context within the body of the claim language to differentiate the light diffusion plate from the anti-glare layer. Thus, it remains clear, under a broad interpretation, that Matsunaga teaches a light diffusion plate [Figure 1] commensurate to the claim language, wherein the anti-glare layer anticipates or provides the same structural details and is considered a light diffusion plate.
- 4. Lastly, in response to Applicant's argument concerning the 103 rejection [Pages 8-9], the Applicant is primarily focusing on the change in size of the thickness of the resin layer without modification to the other elements, such as the amount of light diffusing agent. It thus remains clear and obvious that one ordinarily skilled in the art could modify the thickness of the resin layer to affect the illumination to a desired preference without teaching away from Matsunaga.

The following claims have been rejected in light of the specification, but rendered the broadest interpretation as stated by the Applicant within the context of the claim language and as construed by the Examiner [MPEP 2111].

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Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 1. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsunaga et al. (U.S. Publication 2002/0142133 A1).
- 2. With regards to Claim 1, Matsunaga discloses a light diffusion plate [Figure 1] for a direct type backlight device [Paragraphs 7 and 67] including:
 - A light transmitting thermoplastic resin [Figure 1: (2)]; and
 - A light diffusing agent [Figure 1: (3)],
 - Wherein the light diffusing agent is contained in an amount of 0.2 to 10
 percent by weight with respect to the total weight of the light diffusion plate
 [Paragraph 30] for the direct type backlight device,
 - Wherein a degree of brilliancy of at least one surface of the light diffusion plate is from 20 to 70 percent [Paragraph 12; Table 1].

NOTE: It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations [Ex parte Masham, 2 USPQ2d 1647 (1987)].

3. With regards to Claim 2, Matsunaga discloses the light diffusing plate including a base material layer and; a coating resin layer formed on at least one

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surface of the base material layer, wherein the base material layer and the coating resin layer each includes the light transmitting thermoplastic resin and the light diffusing agent [Paragraph 20].

- 4. With regards to Claim 3, Matsunaga discloses an amount of the light diffusing agent contained in the coating resin layer being 1 to 10 percent by weight with respect to a weight of the coating resin [Paragraph 30].
- 5. With regards to Claim 4, Matsunaga discloses the average particle diameter of the light diffusing agent contained in the coating resin layer being 5 to 30 μm [Paragraph 27; Table 1].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsunaga et al. (U.S. Publication 2002/0142133 A1).

Matsunaga discloses the claimed invention as cited above. In addition, Matsunaga teaches, "Moreover, although a thickness of a resin coated layer 2 is not especially limited, the thickness is about from 3 to 6 μ m, and preferably about from 4 to 5 μ m" [Paragraph 30], but does not specifically teach a thickness of the coating resin layer being 20 to 200 μ m.

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However, it would have been an obvious to one having ordinary skill in the art to have modified the thickness of the resin coated layer to be between 20 to 200 µm, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). In this case, increasing the thickness/size of the resin coated layer to be from 20 to 200 µm would provide for an alternate optical effect (e.g., greater diffusion), in hopes of suppressing a regular reflection of outdoor daylight and to prevent a reflection of outside environment (having antiglare property), for the purpose of improving the visibility of pictures on displays (e.g., LCD surfaces). Matsunaga corroborates the palpable modification, "a thickness of a resin coated layer 2 is not especially limited" [Paragraph 30].

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsunaga et al. (U.S. Publication 2002/0142133 A1) as applied to any of Claims 1 to 5 above, and further in view of Blanchard (U.S. Patent 6,692,137 B2).

Matsunaga discloses the claimed invention as cited above, but does not teach the specifics to the direct type backlight device including a plurality of linear light sources and an optical film.

Blanchard teaches a backlight device including a plurality of linear light sources [Figure 3: (24)], a diffusion plate [Figure 3: (28)], and an optical film [Column 5, Line 47 – Column 6, Line 11] in contact with the diffusion plate.

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate the light diffusion plate of Matsunaga, which has a

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degree of brilliancy from 20 to 70 percent as shown above, into the direct type backlight of Blanchard, in order to optically affect the illumination to a desired preference. Matsunaga corroborates, "In this case, the optical film by the present invention may be installed in one side or both sides of the liquid crystal cell.

When installing the optical films in both sides, they may be of the same type or of different type. Furthermore, in assembling a liquid crystal display, suitable parts, such as diffusion plate, antiglare layer, antireflection film, protective plate, prism array, lens array sheet, optical diffusing plate, and backlight, may be installed in suitable position in one layer or two or more layers" [Paragraph 67; underlines added for emphasis].

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Han whose telephone number is (571) 272-2207. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jason M Han Examiner Art Unit 2875

JMH (9/1/2007)

Sandra O'Shea
Supervisory Patent Examiner

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